

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/933,821DATE: 12/22/97
TIME: 14:09:48

INPUT SET: S22244.raw

This Raw Listing contains the General
Information Section and up to the first 5 pages.

SEQUENCE LISTING

1
2
3 (1) General Information:
4
5 (i) APPLICANT: Godowski, Paul J.
6 Gurney, Austin L.
7
8 (ii) TITLE OF INVENTION: Tie Ligands
9
10 (iii) NUMBER OF SEQUENCES: 17
11
12 (iv) CORRESPONDENCE ADDRESS:
13 (A) ADDRESSEE: Genentech, Inc.
14 (B) STREET: 1 DNA Way
15 (C) CITY: South San Francisco
16 (D) STATE: California
17 (E) COUNTRY: USA
18 (F) ZIP: 94080
19
20 (v) COMPUTER READABLE FORM:
21 (A) MEDIUM TYPE: 3.5 inch, 1.44 Mb floppy disk
22 (B) COMPUTER: IBM PC compatible
23 (C) OPERATING SYSTEM: PC-DOS/MS-DOS
24 (D) SOFTWARE: WinPatin (Genentech)
25
26 (vi) CURRENT APPLICATION DATA:
27 (A) APPLICATION NUMBER:
28 (B) FILING DATE:
29 (C) CLASSIFICATION:
30
31 (viii) ATTORNEY/AGENT INFORMATION:
32 (A) NAME: Dreger, Ginger R.
33 (B) REGISTRATION NUMBER: 33,055
34 (C) REFERENCE/DOCKET NUMBER: P1130
35
36 (ix) TELECOMMUNICATION INFORMATION:
37 (A) TELEPHONE: 650/225-3216
38 (B) TELEFAX: 650/952-9881
39 (2) INFORMATION FOR SEQ ID NO:1:
40
41 (i) SEQUENCE CHARACTERISTICS:
42 (A) LENGTH: 2290 base pairs
43 (B) TYPE: Nucleic Acid
44 (C) STRANDEDNESS: Single
45 (D) TOPOLOGY: Linear
46

ENTERED

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/933,821DATE: 12/22/97
TIME: 14:09:51

INPUT SET: S22244.raw

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:1:

| | | | | | | |
|----|------------|------------|------------|------------|------------|------|
| 47 | GGCTGAGGGG | AGGCCCCGAG | CCTTTCTGGG | GCCTGGGGGA | TCCTCTTGCA | 50 |
| 48 | | | | | | |
| 49 | | | | | | |
| 50 | CTGGTGGGTG | GAGAGAAGCG | CCTGCAGCCA | ACCAGGGTCA | GGCTGTGCTC | 100 |
| 51 | | | | | | |
| 52 | ACAGTTTCCT | CTGGCGGCAT | GTAAGGCTC | CACAAAGGAG | TTGGGAGTTC | 150 |
| 53 | | | | | | |
| 54 | AAATGAGGCT | GCTGCGGACG | GCCTGAGGAT | GGACCCCAAG | CCCTGGACCT | 200 |
| 55 | | | | | | |
| 56 | GGCGAGCGTG | GCACTGAGGC | AGCGGCTGAC | GCTACTGTGA | GGGAAAGAAG | 250 |
| 57 | | | | | | |
| 58 | GTTGTGAGCA | GCCCCGCAGG | ACCCCTGGCC | AGCCCTGGCC | CCAGCCTCTG | 300 |
| 59 | | | | | | |
| 60 | CCGGAGCCCT | CTGTGGAGGC | AGAGCCAGTG | GAGCCCAGTG | AGGCAGGGCT | 350 |
| 61 | | | | | | |
| 62 | GCTTGGCAGC | CACCGGCCTG | CAACTCAGGA | ACCCCTCCAG | AGGCCATGGA | 400 |
| 63 | | | | | | |
| 64 | CAGGCTGCCC | CGCTGACGGC | CAGGGTGAAG | CATGTGAGGA | GCCGCCCCGG | 450 |
| 65 | | | | | | |
| 66 | AGCCAAGCAG | GAGGGAAGAG | GCTTTCATAG | ATTCTATTCA | CAAAGAATAA | 500 |
| 67 | | | | | | |
| 68 | CCACCATTTT | GCAAGGACCA | TGAGGCCACT | GTGCGTGACA | TGCTGGTGGC | 550 |
| 69 | | | | | | |
| 70 | TCGGACTGCT | GGCTGCCATG | GGAGCTGTTG | CAGGCCAGGA | GGACGGTTTT | 600 |
| 71 | | | | | | |
| 72 | GAGGGCACTG | AGGAGGGCTC | GCCAAGAGAG | TTCATTTACC | TAAACAGGTA | 650 |
| 73 | | | | | | |
| 74 | CAAGCGGGCG | GGCGAGTCCC | AGGACAAGTG | CACCTACACC | TTCATTGTGC | 700 |
| 75 | | | | | | |
| 76 | CCCAGCAGCG | GGTCACGGGT | GCCATCTGCG | TCAACTCCAA | GGAGCCTGAG | 750 |
| 77 | | | | | | |
| 78 | GTGCTTCTGG | AGAACCGAGT | GCATAAGCAG | GAGCTAGAGC | TGCTCAACAA | 800 |
| 79 | | | | | | |
| 80 | TGAGCTGCTC | AAGCAGAAGC | GGCAGATCGA | GACGCTGCAG | CAGCTGGTGG | 850 |
| 81 | | | | | | |
| 82 | AGGTGGACGG | CGGCATTGTG | AGCGAGGTGA | AGCTGCTGCG | CAAGGAGAGC | 900 |
| 83 | | | | | | |
| 84 | CGCAACATGA | ACTCGCGGGT | CACGCAGCTC | TACATGCAGC | TCCTGCACGA | 950 |
| 85 | | | | | | |
| 86 | GATCATCCGC | AAGCGGGACA | ACGCGTTGGA | GCTCTCCCAG | CTGGAGAACA | 1000 |
| 87 | | | | | | |
| 88 | GGATCCTGAA | CCAGACAGCC | GACATGCTGC | AGCTGGCCAG | CAAGTACAAG | 1050 |
| 89 | | | | | | |
| 90 | GACCTGGAGC | ACAAGTACCA | GCACCTGGCC | ACACTGGCCC | ACAACCAATC | 1100 |
| 91 | | | | | | |
| 92 | AGAGATCATC | GCGCAGCTTG | AGGAGCACTG | CCAGAGGGTG | CCCTCGGCCA | 1150 |
| 93 | | | | | | |
| 94 | GGCCCGTCCC | CCAGCCACCC | CCCGCTGCCC | CGCCCCGGGT | CTACCAACCA | 1200 |
| 95 | | | | | | |
| 96 | CCCACCTACA | ACCGCATCAT | CAACCAGATC | TCTACCAACG | AGATCCAGAG | 1250 |
| 97 | | | | | | |
| 98 | | | | | | |
| 99 | | | | | | |

RAW SEQUENCE LISTING
PATENT APPLICATION US/08/933,821DATE: 12/22/97
TIME: 14:09:55

INPUT SET: S22244.raw

100 TGACCAGAAC CTGAAGGTGC TGCCACCCCC TCTGCCCCTC ATGCCCCTC 1300
101
102 TCACCAGCCT CCCATCTTCC ACCGACAAGC CGTCGGGCCC ATGGAGAGAC 1350
103
104 TGCCTGCAGG CCCTGGAGGA TGGCCACGAC ACCAGCTCCA TCTACCTGGT 1400
105
106 GAAGCCGGAG AACACCAACC GCCTCATGCA GGTGTGGTGC GACCAGAGAC 1450
107
108 ACGACCCCGG GGGCTGGACC GTCATCCAGA GACGCCCTGA TGGCTCTGTT 1500
109
110 AACTTCTTCA GGAAGTGGGA GACGTACAAG CAAGGGTTTG GGAACATTGA 1550
111
112 CGGCGAATAC TGGCTGGGCC TGGAGAACAT TTACTGGCTG ACGAACCAAG 1600
113
114 GCAACTACAA ACTCCTGGTG ACCATGGAGG ACTGGTCCGG CCGCAAAGTC 1650
115
116 TTTGCAGAA ACGCCAGTTT CCGCCTGGAA CCTGAGAGCG AGTATTATAA 1700
117
118 GCTGCGGCTG GGGCGCTACC ATGGCAATGC GGGTGACTCC TTTACATGGC 1750
119
120 ACAACGGCAA GCAGTTCACC ACCCTGGACA GAGATCATGA TGTCTACACA 1800
121
122 GGAAACTGTG CCCACTACCA GAAGGGAGGC TGGTGGTATA ACGCCTGTGC 1850
123
124 CCACTCCAAC CTCAACGGGG TCTGGTACCG CGGGGGCCAT TACCGGAGCC 1900
125
126 GCTACCAGGA CGGAGTCTAC TGGGCTGAGT TCCGAGGAGG CTCTTACTCA 1950
127
128 CTCAAGAAAG TGGTGATGAT GATCCGACCG AACCCCAACA CCTTCCACTA 2000
129
130 AGCCAGCTCC CCCTCCTGAC CTCTCGTGGC CATTGCCAGG AGCCCACCCT 2050
131
132 GGTCACGCTG GCCACAGCAC AAAGAACAAC TCCTCACCAG TTCATCCTGA 2100
133
134 GGCTGGGAGG ACCGGGATGC TGGATTCTGT TTTCCGAAGT CACTGCAGCG 2150
135
136 GATGATGGAA CTGAATCGAT ACGGTGTTTT CTGTCCCTCC TACTTTCCTT 2200
137
138 CACACCAGAC AGCCCCTCAT GTCTCCAGGA CAGGACAGGA CTACAGACAA 2250
139
140 CTCTTTCTTT AAATAAATTA AGTCTCTACA ATAAAAAAAA 2290
141

(2) INFORMATION FOR SEQ ID NO:2:

(i) SEQUENCE CHARACTERISTICS:

- (A) LENGTH: 493 amino acids
(B) TYPE: Amino Acid
(D) TOPOLOGY: Linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:2:

Met Arg Pro Leu Cys Val Thr Cys Trp Trp Leu Gly Leu Leu Ala
1 5 10 15

RAW SEQUENCE LISTING PATENT APPLICATION US/08/933,821

DATE: 12/22/97
TIME: 14:09:58

INPUT SET: S22244.raw

| | |
|-----|---|
| 153 | |
| 154 | Ala Met Gly Ala Val Ala Gly Gln Glu Asp Gly Phe Glu Gly Thr |
| 155 | 20 25 30 |
| 156 | |
| 157 | Glu Glu Gly Ser Pro Arg Glu Phe Ile Tyr Leu Asn Arg Tyr Lys |
| 158 | 35 40 45 |
| 159 | |
| 160 | Arg Ala Gly Glu Ser Gln Asp Lys Cys Thr Tyr Thr Phe Ile Val |
| 161 | 50 55 60 |
| 162 | |
| 163 | Pro Gln Gln Arg Val Thr Gly Ala Ile Cys Val Asn Ser Lys Glu |
| 164 | 65 70 75 |
| 165 | |
| 166 | Pro Glu Val Leu Leu Glu Asn Arg Val His Lys Gln Glu Leu Glu |
| 167 | 80 85 90 |
| 168 | |
| 169 | Leu Leu Asn Asn Glu Leu Leu Lys Gln Lys Arg Gln Ile Glu Thr |
| 170 | 95 100 105 |
| 171 | |
| 172 | Leu Gln Gln Leu Val Glu Val Asp Gly Gly Ile Val Ser Glu Val |
| 173 | 110 115 120 |
| 174 | |
| 175 | Lys Leu Leu Arg Lys Glu Ser Arg Asn Met Asn Ser Arg Val Thr |
| 176 | 125 130 135 |
| 177 | |
| 178 | Gln Leu Tyr Met Gln Leu Leu His Glu Ile Ile Arg Lys Arg Asp |
| 179 | 140 145 150 |
| 180 | |
| 181 | Asn Ala Leu Glu Leu Ser Gln Leu Glu Asn Arg Ile Leu Asn Gln |
| 182 | 155 160 165 |
| 183 | |
| 184 | Thr Ala Asp Met Leu Gln Leu Ala Ser Lys Tyr Lys Asp Leu Glu |
| 185 | 170 175 180 |
| 186 | |
| 187 | His Lys Tyr Gln His Leu Ala Thr Leu Ala His Asn Gln Ser Glu |
| 188 | 185 190 195 |
| 189 | |
| 190 | Ile Ile Ala Gln Leu Glu Glu His Cys Gln Arg Val Pro Ser Ala |
| 191 | 200 205 210 |
| 192 | |
| 193 | Arg Pro Val Pro Gln Pro Pro Pro Ala Ala Pro Pro Arg Val Tyr |
| 194 | 215 220 225 |
| 195 | |
| 196 | Gln Pro Pro Thr Tyr Asn Arg Ile Ile Asn Gln Ile Ser Thr Asn |
| 197 | 230 235 240 |
| 198 | |
| 199 | Glu Ile Gln Ser Asp Gln Asn Leu Lys Val Leu Pro Pro Pro Leu |
| 200 | 245 250 255 |
| 201 | |
| 202 | Pro Thr Met Pro Thr Leu Thr Ser Leu Pro Ser Ser Thr Asp Lys |
| 203 | 260 265 270 |
| 204 | |
| 205 | Pro Ser Gly Pro Trp Arg Asp Cys Leu Gln Ala Leu Glu Asp Gly |

INPUT SET: S22244.raw

| | | | | | | | | | | | | | | | |
|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| 206 | | | | | 275 | | | | | 280 | | | | | 285 |
| 207 | | | | | | | | | | | | | | | |
| 208 | His | Asp | Thr | Ser | Ser | Ile | Tyr | Leu | Val | Lys | Pro | Glu | Asn | Thr | Asn |
| 209 | | | | | 290 | | | | | 295 | | | | | 300 |
| 210 | | | | | | | | | | | | | | | |
| 211 | Arg | Leu | Met | Gln | Val | Trp | Cys | Asp | Gln | Arg | His | Asp | Pro | Gly | Gly |
| 212 | | | | | 305 | | | | | 310 | | | | | 315 |
| 213 | | | | | | | | | | | | | | | |
| 214 | Trp | Thr | Val | Ile | Gln | Arg | Arg | Leu | Asp | Gly | Ser | Val | Asn | Phe | Phe |
| 215 | | | | | 320 | | | | | 325 | | | | | 330 |
| 216 | | | | | | | | | | | | | | | |
| 217 | Arg | Asn | Trp | Glu | Thr | Tyr | Lys | Gln | Gly | Phe | Gly | Asn | Ile | Asp | Gly |
| 218 | | | | | 335 | | | | | 340 | | | | | 345 |
| 219 | | | | | | | | | | | | | | | |
| 220 | Glu | Tyr | Trp | Leu | Gly | Leu | Glu | Asn | Ile | Tyr | Trp | Leu | Thr | Asn | Gln |
| 221 | | | | | 350 | | | | | 355 | | | | | 360 |
| 222 | | | | | | | | | | | | | | | |
| 223 | Gly | Asn | Tyr | Lys | Leu | Leu | Val | Thr | Met | Glu | Asp | Trp | Ser | Gly | Arg |
| 224 | | | | | 365 | | | | | 370 | | | | | 375 |
| 225 | | | | | | | | | | | | | | | |
| 226 | Lys | Val | Phe | Ala | Glu | Tyr | Ala | Ser | Phe | Arg | Leu | Glu | Pro | Glu | Ser |
| 227 | | | | | 380 | | | | | 385 | | | | | 390 |
| 228 | | | | | | | | | | | | | | | |
| 229 | Glu | Tyr | Tyr | Lys | Leu | Arg | Leu | Gly | Arg | Tyr | His | Gly | Asn | Ala | Gly |
| 230 | | | | | 395 | | | | | 400 | | | | | 405 |
| 231 | | | | | | | | | | | | | | | |
| 232 | Asp | Ser | Phe | Thr | Trp | His | Asn | Gly | Lys | Gln | Phe | Thr | Thr | Leu | Asp |
| 233 | | | | | 410 | | | | | 415 | | | | | 420 |
| 234 | | | | | | | | | | | | | | | |
| 235 | Arg | Asp | His | Asp | Val | Tyr | Thr | Gly | Asn | Cys | Ala | His | Tyr | Gln | Lys |
| 236 | | | | | 425 | | | | | 430 | | | | | 435 |
| 237 | | | | | | | | | | | | | | | |
| 238 | Gly | Gly | Trp | Trp | Tyr | Asn | Ala | Cys | Ala | His | Ser | Asn | Leu | Asn | Gly |
| 239 | | | | | 440 | | | | | 445 | | | | | 450 |
| 240 | | | | | | | | | | | | | | | |
| 241 | Val | Trp | Tyr | Arg | Gly | Gly | His | Tyr | Arg | Ser | Arg | Tyr | Gln | Asp | Gly |
| 242 | | | | | 455 | | | | | 460 | | | | | 465 |
| 243 | | | | | | | | | | | | | | | |
| 244 | Val | Tyr | Trp | Ala | Glu | Phe | Arg | Gly | Gly | Ser | Tyr | Ser | Leu | Lys | Lys |
| 245 | | | | | 470 | | | | | 475 | | | | | 480 |
| 246 | | | | | | | | | | | | | | | |
| 247 | Val | Val | Met | Met | Ile | Arg | Pro | Asn | Pro | Asn | Thr | Phe | His | | |
| 248 | | | | | 485 | | | | | 490 | | | 493 | | |

(2) INFORMATION FOR SEQ ID NO:3:

(i) SEQUENCE CHARACTERISTICS:

(A) LENGTH: 3355 base pairs

(B) TYPE: Nucleic Acid

(C) STRANDEDNESS: Single

(D) TOPOLOGY: Linear

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

PAGE: 1

SEQUENCE VERIFICATION REPORT
PATENT APPLICATION US/08/933,821

DATE: 12/22/97
TIME: 14:10:06

INPUT SET: S22244.raw

Line

Error

Original Text